

torium of the Museum of the Brooklyn Institute of Arts and Sciences, Eastern Parkway and Washington Ave., Borough of Brooklyn, New York City. The President, Dr. George Frederick Kunz, was in the Chair.

The announced program presented was "an exhibit by the Secretary of 150 lantern slide photographs of various mineral localities of New York City and vicinity, past and present, and some of the minerals they have produced." These photographs were chiefly made by or for the speaker from time to time since 1867, but included a few of special interest contributed by others.

The views of localities illustrated, some the gradual working out of veins, and others groups of Club members on various excursions. The exhibit included many selected to show the comparative results afforded by various photographic methods, and many kinds of plates, such as the old time collodion wet plate, the Monroe, Carbutt, Cramer, Stanley, and Seed plain dry plates (some hand colored), the Seed G.B.P.R. color plates, and the Jougla and Dufay Autochrome or natural color plates. Cabinet specimens shown in the views were mounted on blocks with attached labels, each of standard size and the specimens shown in the photomicrographs were mounted in standard Rakestraws. The illustrations were thus designed to be of interest from diverse points of view.

Upon conclusion of the lecture a vote of thanks was tendered to the speaker, and after a brief "conversazione" the meeting adjourned.

WALLACE GOULD LEVISON, *Secretary.*

NEW MINERALS

COLERAINITE

Eugene Poitevin and R. P. D. Graham: Contributions to the mineralogy of Black Lake Area, Quebec. *Canada Dept. Mines, Museum Bull.* 27, 66-73, 1918.

NAME: from the locality, Coleraine township, Quebec.

PHYSICAL PROPERTIES

Color: colorless to white, faint pink and pale brown. Luster: vitreous, dull or pearly. Form: thin hexagonal plates or flakes (1 mm. in diameter), often aggregated into rosettes or spheres; also fine granular and compact. Sp. Gr. = 2.51. H. = 2.5 - 3.

OPTICAL PROPERTIES

Under the microscope the crystal flakes are isotropic; uniaxial, the optic axis emerging normal to the flakes; birefringence + and weak, with mean refractive index about 1.56.

CHEMICAL PROPERTIES

Composition: $H_5Mg_2AlSiO_8$, a hydrated magnesium aluminium silicate, near newtonite. An analysis of crystals by M. F. Conner gave: SiO_2 24.40, Al_2O_3 22.77; Fe_2O_3 0.45, MgO 32.70, CaO 0.10, $(Na,K)_2O$ 0.30, MnO 0.09, H_2O 19.63, sum 100.44 per cent.

B. B. whitens, disintegrates, finally fusing to a white glass which moistened and heated with cobalt nitrate becomes blue. In the closed tube whitens and decrepitates. Decomposed with difficulty by HCl with the separation of flocculent silica.

OCCURRENCE

Colerainite occurs in veins believed to be of pegmatitic origin in serpentine. Found at the old Standard mine and on the dumps of the Union Pit, Coleraine Township, Megantic County, Quebec.

S. G. G.

ABSTRACTS OF MINERALOGIC LITERATURE

CONTRIBUTIONS TO THE MINERALOGY OF BLACK LAKE AREA, QUEBEC. EUGENE POITEVIN and R. P. D. GRAHAM; *Canada Dept. Mines, Museum Bull.* 27, 82 pp., 12 pl., 22 figs.; 1918.

This bulletin is descriptive of the minerals of the Black Lake Area, in the "serpentine belt," Megantic township, Quebec. The rocks of the belt are predominantly basic,—gabbro, diabase breccia, pyroxenite, peridotite, and serpentine,—but include granite and aplite; all are believed to have originated by progressive differentiation from a single parent magma.

A peculiar occurrence is that of calcium silicates, diopside, vesuvianite and grossularite in compact granular dikes in peridotite or serpentine. It is suggested that these dikes were deposited by hydrothermal solutions as the last stage of the intrusion, deriving much of the lime from the walls of the fissure thru which the solutions passed.

Thirty-four minerals are described, including diamond, chromite, quartz, calcite, aragonite, stichtite, diopside, grossularite, vesuvianite, clinocllore, serpentine, apatite, and one new mineral, colerainite (described under that heading above).

Microscopic diamonds occur in chromite, the crystals exhibiting parallel growth of the octahedron.

The following doubtful forms were observed on quartz: (13.6.19.6), (9.5.14.5), (13.9.22.9), (6.5.11.5), the last fairly well defined.

The rare mineral stichtite, previously found only in Tasmania, was noted at the old Megantic mine, occurring as small lilac-colored patches or narrow veinlets in serpentine.

Diopside occurs in several varieties, one remarkable absolutely colorless and transparent, in pseudoprismatic crystals due to the unique development of the acute hemi-pyramid λ (331). Thirty-nine forms were observed, including the new ones: χ_1 (610), D_1 (13.0.4), J_1 (902), I_1 (701), Y (423), r (15.4-10), s (534), x_1 (773), δ_1 (8.11.4), N_1 (191), O_1 (10.13.3); and the rare forms: g (210), \mathfrak{R} (140), F (301), I (702), M (401), Ψ (501), n (102), ρ (332), W (441), L (131), ϵ (121), and λ_1 (552). An analysis gave: SiO_2 54.77, Fe_2O_3 0.17, FeO 0.89, MnO 0.11, MgO 18.46, CaO 26.33, sum 100.73%. The refractive indices were determined by total reflection: $\alpha = 1.669$, $\beta = 1.676$, $\gamma = 1.698$.

Grossularite occurs, exhibiting the following forms: a (100), δ (610), e (210), g (320), r (332), m (311), n (211), and s (321); an analysis is given.

Vesuvianite occurs in a variety of colors and fairly rich in forms, including the rare ones v (151), and r (461). An average of 10 fairly good determinations of n by total reflection gave $\omega = 1.768$, $\epsilon = 1.705$, $\omega - \epsilon = 0.003$. Several analyses are given.

S. G. G.